

REMARKS

This amendment is being filed in response to the Office Action mailed September 23, 2005. In that Office Action, claims 1-17 were rejected on prior art grounds. Claims 1, 2, 5, and 6, are being amended. Claims 7-17 have been cancelled and new claims 18-24 have been added. Accordingly, claims 1-6 and 18-24 remain pending in the application.

The cancellation of claims 7-17 is without disclaimer of the subject matter thereof and without prejudice to Applicants' right to later submit one or more claims covering the subject matter thereof in this or another application.

Claim rejections

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Frisbie. The rejection is respectfully traversed for the reasons discussed below. Although claims 7-17 have been canceled and will not be further discussed, Applicants' nonetheless traverse the rejection of those claims on the basis that the subject of those claims is not disclosed or rendered obvious by the prior art cited by the Examiner.

Frisbie discloses a circuit arrangement generating radio frequencies using a signal generator, an oscillator (e.g., LC) circuit, and one or more electronic switches, such as PNPN diodes. More specifically, an AC voltage signal or tone generator is used to provide a sinusoidal wave such as is shown in Figs. 2A and 3A. This ac waveform is then used to activate a PNPN diode which, when triggered, causes a burst of damped oscillations at an rf frequency suitable for the particular application involved. For the walkie-talkie or portable telephone example of Fig. 4, the input ac control waveform can be superimposed with an input analog (voice) signal to change the timing between the damped oscillation pulses such that the device can transmit the voice signal at rf frequencies using pulse repetition rate modulation. Thus, the input ac waveform of Figs. 2A and 3A are not a carrier signal used to carry the voice signal over the wireless connection to another device, but are periodic signals that are used to trigger the diode at a phase dependent on both the ac waveform and the superimposed input signal. Once the

diode switches, a damped rf oscillating pulse is generated which is what is transmitted wirelessly.

Claim 1, as amended, is directed to a method for establishing a telephony data connection to a receiver in which the telephony connection is initiated across a wireless carrier system having at least one network component that prevents an uninterrupted carrier signal from being detected by the receiver. In order to successfully pass the carrier signal through the network component, the carrier signal is modified by intermittently adding a period of quiescence so that it can be successfully sent to the receiver via the network component without the modified carrier signal being completely removed or attenuated to the point of being undetectable by the receiver. As discussed in the specification, an advantage of this method of claim 1 is that it can be used for tone validation when establishing a telephone connection even though there may be components of the communications network that would otherwise attenuate the carrier signal, preventing its detection by the receiver. The combination of steps noted above from claim 1 (the initiating, modifying, and sending steps) are not disclosed or otherwise rendered obvious by Frisbie. Nowhere does Frisbie teach or suggest sending a modified carrier signal to a receiver via a wireless communication system network component that prevents an uninterrupted version of the carrier signal from being detected by the receiver. Rather, his disclosed use of the rf transmitter embodiment for wireless voice communication is as a direct device-to-device transmission (e.g., a walkie-talkie), with no discussion or suggestion of using a wireless carrier system having at least one network component that attenuates one or more uninterrupted carrier signals.

Accordingly, Applicants respectfully submit that claim 1, as amended, patentably distinguishes over Frisbie. Claims 2-6 each ultimately depend from claim 1 and should be allowable therewith.

New Claims 18-24

Independent claim 18 is directed to a method of using a carrier signal tone to establish a telephony connection for voice or data communication. The method includes the steps of:

initiating the telephony connection using a wireless carrier system having at least one network component that attenuates the carrier signal tone when it is sent through the network component as a continuous carrier signal;

generating a carrier signal comprising a carrier signal tone that is periodically interrupted; and

sending the carrier signal over the telephony connection to a receiver, wherein said sending step further comprises passing the carrier signal through the network component such that the carrier signal is detectable at the receiver.

Support for the subject matter of this claim is contained in the application at Page 7, line 21, to Page 8, line 29. Neither Frisbie nor the other prior art of record teach or suggest this combination of steps and, in particular, Frisbie neither teaches nor suggests either of the initiating and sending steps quoted above. Accordingly, claim 18 patentably defines over the prior art of record. Claims 19-24 each ultimately depend from claim 18 and should be allowed therewith.

Other Observations

In the Office Action, Official Notice was taken of telephone “data” connections and receiving identification data from a receiver. As to the first of these, while telephone data connections are known, the telephone connection example discussed in Frisbie is specifically identified as a voice connection. Nonetheless, Applicants are not presently basing patentability on the difference between voice and data telephone connections, since telephone data connections are sometimes implemented by sending data over a voice connection using, for example, modulation of a voice frequency band carrier signal that is modulated using the data so that it can be passed through the voice connection and demodulated at the receiving end. In this regard, the “telephone data connection” as used in the claims, can include both a data only connection or a voice connection through which data can be passed using any suitable technique known to those skilled in the art. Although “telephone data connection” is mostly used in the specification, Applicants note that, as stated at Page 8, lines 12-15, the invention is not limited to data communication but can be used for voice communications as well. Accordingly, claim 18 is directed to

use of a carrier signal tone to establish a telephone connection that can be used for voice or data communication.

With regard to the use of the term "wireless carrier system," this term can refer to cellular-type networks such as those that use CDMA (as disclosed in the specification) and, as used in the claims, this term means any carrier system capable of providing a telephony connection over a wireless communication link, such as cellular carrier systems and satellite carrier systems. Also, the terms "intermittently" and "periodically" in the claims refer to events that can occur at either regular or irregular intervals.

In view of the foregoing, Applicants respectfully submit that all claims are allowable over the prior art. Reconsideration is therefore requested. The Examiner is invited to telephone the undersigned if doing so would advance prosecution of this case.

The Commissioner is hereby authorized to charge Deposit Account No. 07-0960 for a three month extension of time, as well as for any other required fees, or credit any overpayment associated with this communication.

Respectfully submitted,

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Date: June 21, 2006
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